

Conversion in disguise

Observations on Papiamentu non-affixal morphology¹

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1. Introduction

This paper looks at Papiamentu¹ non-affixal morphology which relates verbs to deverbal nouns. Its aim is to demonstrate that three seemingly diverse processes (conversion, tone shift and stress shift) are instances of one and the same process: that of conversion. Evidence will be provided for the semantic and phonological unity of these processes. Their superficial differences will be seen to follow from the properties of stress and tone assignment in Papiamentu. The behaviour of affixed forms under stress and tone assignment provides additional support for the proposed analysis.

Before we turn to a discussion of non-affixal morphology, we will look briefly at Papiamentu derivational morphology (1.1) and the etymology of Papiamentu words (1.2). Section 2 contains the data for the discussion. A brief discussion of Papiamentu tone and stress in section 3 precedes section 4 in which a unified account of non-affixal morphology is given. Section 5 contains some remarks on the productivity of conversion.

1.1. Papiamentu derivational morphology

At least half of the Papiamentu lexicon consists of morphologically complex words as is immediately obvious, for instance, from inspection of Joubert's 1991 dictionary. This is, in fact, a conservative estimate, as many Papiamentu compounds are not included in this or any other

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dictionary of Papiamentu (Dijkhoff 1980; Mansur 1991). However, most of these words are not actually derivable in Papiamentu: they have been inherited as morphologically complex items. Thus, while speakers will recognize that *koherente* 'coherent' and *koherensia* 'coherence' are related items, as are *inosente* 'innocent' and *inosensia* 'innocence', there is no evidence that this relationship can be extended to new pairs. Dijkhoff (1993: 74-80) lists a total of 74 derivational suffixes and 12 derivational prefixes. She argues that only two of the suffixes are productive, while a few others are developing (limited) productivity. The productive suffixes are *-mentu*, which derives deverbal action nominals and *-dó* which derives deverbal nouns denoting the external argument of the verbal base; among the other suffixes, the primary candidate for nativization appears to be *-shon*, which derives deverbal descriptive nouns. Examples of derivational affixes are given below.

We should note that all (partially) productive suffixes of Papiamentu are etymologically Iberian. Extension of their use to bases of non-Iberian etymology or bases which do not take the suffix in Iberian, as in the examples below, is therefore a reliable sign of (developing) productivity. In addition, Papiamentu employs non-affixal morphology. This will be the subject of discussion below.

(1) deverbal nouns:

Ib *morde* 'bite, hurt' + *-mentu* → *mordementu* 'pain, ache', Du *stir* 'steer, drive' + *-mentu* → *stirmentu* 'steering'

Du *ferf* 'paint' + *-do* → *ferfdó* 'painter', Ib *risibí* 'receive' + *-dó* → *risibidó* 'recipient'

Ib *isolá* 'isolate' *-shon* → *isolashon* 'isolation', Ib *palabrá* 'agree' + *-shon* → *palabrashon* 'agreement'

(2) other derived words:

Du *harka* 'rake' (v) + *-bel* → *harkabel* 'rakeable'²

Du *skars* 'scarce' + *-dat* → *skarsedat* 'scarcity'

Du *bleki* 'tin (can)' + *-ero* → *blekero* 'smith'

Ib *editá* 'edit' + *-re-* → *reeditá* 'reprint'

E *feks* 'repair' (v) + *-eria* → *fekseria* 'shoe-repair shop'

Du *ferbal* 'warrant' (n) + *-isá* → *ferbalisá* 'write out a warrant' (v)

1.2 The relevance of etymology

Papiamentu vocabulary is etymologically divided into Iberian and non-Iberian vocabulary. The latter part is mostly of Dutch etymology, but

there is also a (growing) number of words of English origin. We may invoke geological layering as a metaphor for the development of Papiamentu vocabulary. The earliest layer consists of words of seventeenth century Iberian provenance; the term Iberian is used here to avoid discussion of its precise origin which has been argued to be Portuguese by some (e.g. Smith 1987), Spanish by others (e.g. Maduro 1966). Covering and obscuring this first layer is a layer of words of (Venezuelan) Spanish etymology which constitutes the bulk of Papiamentu vocabulary and is still growing. Thin sediments of words of Dutch etymology may be found throughout this formation.

In spite of its status as the official language of the territories where Papiamentu is spoken (the islands Aruba, Bonaire, Curaçao), Dutch is becoming less and less commonly used even in domains that are traditionally reserved for it such as the administration of government and the educational system, a development which testifies to the prestige which Papiamentu is accorded by its speakers. It is to be expected therefore that Dutch will become less and less significant as a potential source for new words. Last, there is a thin but growing layer of words of English etymology in particular in the area of technological innovation.

In view of the importance of the tourist industry which taps the North American market and brings a large part of the population of the islands in contact with native speakers of Anglo-American, it is to be expected that the number of words of English etymology will continue to grow and expand in other areas.

In order to distinguish between them, we will refer to items of Iberian, Dutch and English etymology as Ib, Du and E, respectively. An Ib/Du/E word should be read to mean: a word of Iberian/Dutch/English etymology. The distinction is morphologically interesting for three reasons: (i) most of Papiamentu affixal morphology is of Iberian origin; (ii) we find quite a bit of "frozen", i.e. unproductive morphology in the Iberian vocabulary of Papiamentu which can be related directly to complex etymological forms; (iii) Papiamentu vocabulary seems roughly divided along etymological lines with respect to some of the productive morphology that words may take.

2 Non-affixal morphology: the data³

We can distinguish three non-affixal types of relationship between verbs and deverbal nouns: (i) conversion, which is mainly relevant to monosyllabic verbs; (ii) tone contrast, which is relevant only to bisyllabic verbs; (iii) stress contrast, which is relevant only to polysyllabic verbs,

sometimes combined with final vowel change. Although classification is not always straightforward, these morphological relations denote roughly three semantic types of verb/noun relationships: (a) verbs which denote an activity which requires an instrument or instrumental product characteristic of that activity are typically found as verb/instrument or verb/instrumental product pairs; (b) verbs which denote an activity which produces a characteristic end-product are found in verb/product pairs; (c) verbs which denote an activity which produces a characteristic event or situation are found in verb/event or situation pairs. This is also the order in which examples will appear in (3)-(8). Miscellaneous relationships are listed as category (d).

2.1 Conversion of monosyllabic verbs

The number of monosyllabic verbs is small as compared to the number of longer verbs: Joubert (1991) contains approximately 275 monosyllabic verbs. There is a predominance of Du items in this class, whereas Ib verbs are less frequent even than E verbs. Some monosyllabic verbs have homophonous related nouns. While most of these verbs are Du, we also find some E verbs with related nouns (e.g. *dòm*, *djèk*, *klèsh*), none Ib. As a reminder, the pairs in (a) illustrates verb/instrument or instrumental product pairs, (b) verb/endproduct pairs, (c) verb/event pairs, (d) miscellaneous.

- (3) a. *bor* 'drill' (v/n), *djèk* 'jack (of car)' (v/n), *fluit* 'whistle' (v/n), *was* 'polish' (v/n)
 b. *dòm* 'dump' / 'rubbish-dump', *slais* 'slice' (v/n), *zòm* 'hem' (v/n), *ploi* 'fold' (v/n)
 c. *klèsh* 'dispute, clash' (v/n), *snek* 'sob' (v/n), *hap* 'yawn' (v/n), *noi* 'invite' / 'invitation'
 d. *frei* 'court (a p.)' / 'sweetheart', *blas* 'blow' / 'balloon', *fer* 'spring' (v/n)

2.2 Tone shift in bisyllabic verbs

Joubert (1991: 323-330) lists 251 pairs of bisyllabic vowel-final words which contrast only in tone melody: in each case, one member of the pair combines penultimate stress with a LH melody, the other with a HL melody. Of these, all except 37 are verb (LH)/noun (HL) pairs. In about half of the cases there is a clear semantic relation between the verb and noun; these are the cases that we are concerned with here. An illustration

follows: the verb *peña* 'comb' is compared with the instrumental noun *peña* 'comb'.

- (4) $\left[\begin{array}{cc} \text{L} & \text{H} \\ \text{pe} & \text{ña} \end{array} \right]_V$ $\left[\begin{array}{cc} \text{H} & \text{L} \\ \text{pe} & \text{ña} \end{array} \right]_N$

In addition to the pairs in Joubert's list, there are some verb/noun pairs which differ in the quality of the final vowel in addition to the tone contrast: the verb ends in *-a*, the noun in *-o* or *-u*. While none of the lexical source languages could have provided a model for the tone contrast, the vowel change in some of these pairs (*gancha*, *grita*, *roba* below) is an inherited property of the Ib etyma. Some non-Ib verbs can also be found as verb/noun pairs (e.g. Du *dueila*, *feila*).

- (5) a. *dueila* 'mop' (v/n), *peña* 'comb' (v/n), *blancha* 'whitewash' (v/n),
 feila / *feilu* 'file' (v/n)
 b. *kaska* 'peel' (v/n), *huma* 'smoke' (v/n), *fura* 'line' *furu* 'lining'
 c. *roba* 'rob' *robo* 'robbery', *bende* 'sell/sale', *pousa* 'pause, break'
 (v/n), *grita-gritu* 'scream' (v-n)
 d. *gagu* 'stutter' / 'stutterer', *rama* 'twine (of plant)' (v) / 'vine' (n)

2.3 Stress shift in bisyllabic verbs

Some bisyllabic verbs have related nouns homophonous with the participle form. The participle of Ib verbs differs from the base in stress placement: penultimate in bisyllabic verbs, final in the corresponding participle forms.⁴ Dijkhoff claims that nouns derived by stress shift seem to have a more specialized meaning than those derived by tone shift (1993: 92). However, except for one case that could fit category (a) and some miscellaneous pairs (category d), these nouns refer typically to concrete or abstract results: categories (b) and (c) are by far the most numerous. This concurs with the interpretation of the participle as referring to the completion of an event. These nouns are better accounted for as deriving from the participle through conversion than from the verbal base through stress shift.⁵

- (6) a. *bisti* 'dress, wear (clothes)' *-bistí* 'dress' (n)
 b. *habri* 'open' *-habrí* 'opening' (n), *stoba* 'stew' *-stobá* '(particular type of) stew', *huña* 'scratch' *-huñá* 'scratch' (n)
 c. *bôfta* 'cuff, box' *-bôftá* 'cuff' (n), *hari* 'laugh' *-hari* 'laugh' (n), *bula* 'jump, fly' *-bulá* 'jump, flight' (n), *choka* 'strangle' *-choká* 'strangulation'
 d. *peña* 'comb' *-peñá* 'hairstyle', *piská* 'fish' (v) *-piská* 'fish' (n), *tapa* 'cover, lid' *-tapá* 'portion of food given by one neighbour to another'

2.4 Conversion of bisyllabic verbs

Dijkhoff notes that there are some bisyllabic Du and E verbs which do not meet the constraints for tone shift or stress shift as they have a HL melody and in some cases do not end in a vowel. Some of these submit instead to conversion, i.e. they have homophonous related nouns (1993: 91,96-7).⁶ There are few such verb/noun pairs, most of them in category (a), i.e. verb/instrument pairs, some in (b) and (c), i.e. verb/product and verb/event pairs.

- (7) a. *skòmel* 'swing' (v/n), *feter* 'lace'/'shoe-lace', *chapi* 'weed'/'hoe'
 b. *púiru* 'powder' (v/n), *stichi* 'stitch' (v/n)
 c. *respu* 'belch' (v/n), *sunchi* 'kiss' (v/n), *keiru* 'stroll' (v/n)

2.5. Stress shift in longer verbs

Some trisyllabic and longer verbs - a class which typically consists of Ib verbs - have related nouns with penultimate or antepenultimate stress, whereas the verbs all have final stress. In some of these pairs the verb and noun end in a different vowel (-a for the verb, -o or -u, sometimes -e or -i for the noun). Both the stress placement in the nouns and the vowel alternation in some forms correspond to the properties of the Iberian etyma. We have found few cases of verb/instrumental product relations (category a), many more of verb/typical product (b) and event (c) relations; quite a few of these display semantic idiosyncrasies inherited from the Iberian etyma.

- (8) a. *venená* 'poison'-*venenu* 'poison', *vakuná* 'vaccinate'-*vakuna* 'vaccination'
 b. *anunsiá* 'announce'-*anunsio* 'announcement, advertisement', *fakturá* 'invoice'-*faktura* 'invoice'
 c. *abandoná* 'desert'-*abandono* 'desertion', *enkargá* 'entrust'-*enkargo* 'charge, responsibility'
 d. *praktiká* 'practise, pursue'-*práktika* 'practice, pursuit'

3 Non-affixal morphology and stress and tone assignment

At first glance, it seems that non-affixal morphology is prosodically circumscribed: statements about what constitute potential bases for conversion, tone shift and stress shift make crucial reference to the organization of segmental material into syllables and/or to tonal melodies (see Table 1). However, there are two facts that militate against a

treatment of these as separate processes: their semantic uniformity, and their complementary distribution. We will see below that the apparent differences in bases and output forms are a direct result of the tone and stress properties of Papiamentu verbs of different length. A brief digression into Papiamentu tone and stress is necessary here.

INPUT TEMPLATE	TYPICAL SOURCE	TYPICAL NON-AFFIXAL MORPHOLOGY	OUTPUT TEMPLATE
monosyllabic, H	Du/E	conversion	monosyllabic, H
bisyllabic, LH, penultimate stress	Ib	tone shift conversion from participle	bisyllabic, HL, penultimate stress bisyllabic, LH, final stress
bisyllabic, HL, penultimate stress	Du/E	conversion	bisyllabic, HL, penultimate stress
trisyllabic or longer, ...H, final stress	Ib	stress shift (+ vowel change)	trisyllabic or longer, penultimate H and stress

Table 1. Non-affixal morphology

Treatments of Papiamentu stress have assumed it to follow an Iberian pattern, and the orthography reflects this. Regular stress is thought to be penultimate for words ending in a vowel or l, r, n, final for words ending in another consonant or a diphthong. In words that do not conform to this pattern the placement of stress is marked in the orthography by an acute. This creates an immediate problem for the treatment of verbs: all trisyllabic and longer verbs end in a vowel and have final stress. These verbs are thus treated as an open-ended class of exceptions, although their behaviour is actually fully predictable. Stress assignment in verbs should therefore be treated separately from that of other words. Römer has drawn attention to the existence of tone in Papiamentu (Römer 1977, 1991). Papiamentu has two level tones, H (high) and L (low), no contour tones. For approximately 250 pairs of bisyllabic words of identical segmental shape and stress, pitch is the only clue for the difference in category and meaning (Joubert 1991). The examples in (9) illustrate this (from Römer 1977; see also the examples in (5)). The diacritics indicate tones here (` L and ´ H) and should not be confused with the

orthographic use of ' to mark the stressed syllable; the stressed syllable is marked by underline.

- (9) LH melody: pàpà 'father'
 màtá 'kill'
 kàská 'peel' (v)
- HL melody:
 pápà 'porridge'
 màtā 'plant, tree'
 kàskā 'peel' (n)

It is significant that tone contrasts cannot be found for monosyllabic, trisyllabic or longer words. It is equally significant that there is usually neither more nor less than one H in a word, and that this coincides with (main) stress placement except in bisyllabic verbs (such as the first mention of *mata*, *kaska* above), and in a relatively small number of other words (such as the first mention of *papa* above). The upshot of all this is that, with few exceptions, the placement of main stress and H in Papiamentu words can essentially be predicted from categorial class membership and syllable weight (see Devonish & Murray, this volume); schematically:

CONTENT WORDS				
verbs of two or more syllables		monosyllables:	nouns / adjectives of two or more syllables	
bisyllabic:	polysyllabic:		final heavy syllable:	final light syllable:
final H, penultimate stress	final H and stress	H	final H and stress	penultimate H and stress
<i>kaska</i> 'peel'	<i>kuminsá</i> 'begin'	<i>stôf</i> 'dust'	<i>falis</i> 'suitcase'	<i>buraku</i> 'hole'

Table 2: Stress and tone assignment

Bisyllabic verbs thus constitute the only class with a consistent pattern of non-cooccurrence of H and stress (with the exceptions noted in 2.4). Longer verbs have H on the stressed final syllable. Secondary stress - which is assigned to alternating syllables - is optionally realized as H and unstressed syllables receive default L. Exceptions are bisyllabic verbs with penultimate stress and irregular HL; as noted earlier, these are all Du or E: no bisyllabic Ib verbs have a HL melody.

(10) monosyllabic verbs:	bisyllabic verbs:	trisyllabic/longer verbs:	irregular bisyllabic verbs:
<i>dal</i> 'hit'	<i>kore</i> 'run'	<i>kuminsá</i> 'begin'	<i>sunchi</i> 'kiss'
<i>brek</i> 'brake'	<i>boltia</i> 'turn over'	<i>abandoná</i> 'abandon'	<i>skeiru</i> 'brush'
<i>zuai</i> 'swing'	<i>dueila</i> 'mop'	<i>reboltia</i> 'mess up'	<i>feter</i> 'lace'
<i>sker</i> 'tear'	<i>sintí</i> 'feel'	<i>distribuf</i> 'distribute'	<i>fangu</i> 'catch'
<i>skòp</i> 'kick'	<i>kuèrdè</i> 'wind (a watch etc)'	<i>aparesé</i> 'appear'	<i>wèlder</i> 'weld'

Regular tone and stress assignment in nouns (and adjectives and adverbs) is quantity sensitive. If the final syllable is heavy, main stress and a H are assigned to the final syllable; if the final syllable is light, main stress and a H are assigned to the penultimate syllable. A syllable is heavy if the rhyme contains at least two weight units.⁷ Again, secondary stress is optionally realized as H and unstressed syllables are assigned default L. The following are examples of underived nouns. Exceptions, as illustrated in the final column, are of two kinds: nouns with H and stress on the wrong syllable, as indicated in the orthography by means of an acute, and nouns with regular stress but a non-cooccurrence of H and stress.

(11) monosyllabic nouns:	final H	penultimate H and stress:	irregular tone or stress:
<i>stòf</i> 'dust'	<i>koneu</i> 'rabbit'	<i>lagadishi</i> 'lizard'	<i>karnisá</i> 'pickled meat'
<i>roi</i> 'cleft, crevice'	<i>karènt</i> 'currant'	<i>kuèrdè</i> 'spring (of watch)'	<i>mártir</i> 'martyr'
<i>but</i> 'fine'	<i>bagon</i> 'marble'	<i>òrgel</i> 'organ'	<i>ásido</i> 'acid'
<i>pich</i> 'peach'	<i>òmbeskòp</i> 'insole'	<i>buraku</i> 'hole'	<i>mucha</i> 'child' (LH)

4 Conversion in disguise

Given that Papiamentu displays a strong preference for the cooccurrence of H and stress on the same syllable, bisyllabic verbs with their LH tone melody and stress on the L-bearing syllable constitute a class of words which are less than well formed. Stress shift to the final syllable, which is used in the formation of the participle from which some nouns also derive, and tone adjustment to a HL melody, which is used in the formation of deverbal nouns, create such cooccurrence. The latter produces a better result in that it also yields the penultimate stress which we have seen is the preferred stress for nouns and adjectives which end in a light syllable. The representation in (12)-(13) follows the conventions of (9).

- (12) stem: LH melody participle: LH melody noun: HL melody
kàska 'peel' (v) kàská 'peeled' káskà 'peel' (n)

In verbs of three or more syllables a H tone and main stress cooccur on the final light syllable, whereas the related nouns have the preferred cooccurrence of H and stress on the penultimate syllable, as shown in (13). Obviously, none of this applies to monosyllabic verbs for which conversion is the only type of non-affixal morphology available. Note again that bisyllabic verbs with a HL melody, i.e. cooccurrence of H and main stress on the penultimate syllable, are not eligible to stress or tone shift.

- (13) stem: LLH melody noun: LHL melody
vàkùnà 'vaccinate' vákúnà 'vaccination'

However, whereas tone shift and stress shift may be descriptively accurate labels for the phonological difference between verbs and deverbal nouns, they fail to capture the fact that deverbal nouns essentially behave as underived nouns with respect to tone and stress assignment: the output of tone shift yields bisyllabic nouns such as *kaska* in (12) which can in no way be distinguished from underived bisyllabic nouns with a final light syllable. Similarly, the output of stress shift in trisyllabic and longer verbs yields nouns such as *vakuna* in (13) which behave like underived nouns with a final light syllable. Also, as noted earlier, the semantic unity of the non-affixal processes of conversion, tone shift and stress and their complementary distribution make a treatment of these three processes suspicious.

I propose instead to treat these as instances of a single process: conversion. The cosmetic differences follow from the predictable properties of tone and stress placement in Papiamentu. Tone shift and stress shift are thus processes of conversion in disguise. A simple assertion, viz. that conversion precedes the predictable assignment of stress and tone, derives the correct result for monosyllabic verbs such as *bor* and related nouns, for bisyllabic LH verbs such as *kaska* and related HL nouns, and for longer verbs such as *vakuná* and related nouns.

For deverbal nouns homophonous with the participle we postulated conversion of the participle rather than derivation from the uninflected verb. Bisyllabic HL verbs such as *sunchi* have an unpredictable melody, and must be assumed to have an underlyingly present H tone associated with the first syllable. Conversion does not affect this, and we again derive the correct output: a HL bisyllabic deverbal noun. Longer deverbal nouns with irregular stress placement are similarly assumed to

contain a H tone associated with the unpredictably stressed syllable in the underlying representation. Examples are given in (14); the representation again follows the conventions of (9). Note that this is to be interpreted as a generalization over relations between verbs and nouns, not as a statement concerning the productive derivation of new pairs.

We will see below that there is little evidence that conversion is a synchronically productive process. The first column in (14) contains the base forms (verbs), the second one the converted forms (nouns); the derivations given are those where a base passes through the morphology without conversion, yielding a verb, and those where conversion applies, yielding a related noun. The result of predictable stress/tone assignment (see Table 2) is given in the third column. The presence of a prelinked H in a base or a converted form is respected by stress/tone assignment.

(14) base:	converted form:	stress/tone assignment:
<i>bor</i>	--	<i>bór</i> 'drill' (v)
<i>bor</i>	<i>bor</i>	<i>bór</i> 'drill' (n)
<i>kaska</i>	--	<i>kàská</i> 'peel' (v)
<i>kaska</i>	<i>kaska</i>	<i>káskà</i> 'peel' (n)
<i>súnc̣hì</i>	--	<i>súnchì</i> 'kiss' (v)
<i>súnc̣hì</i>	<i>súnchì</i>	<i>súnchì</i> 'kiss' (n)
<i>vakuna</i>	--	<i>vàkúná</i> 'vaccinate' (v)
<i>vakuna</i>	<i>vakuna</i>	<i>vákúnà</i> 'vaccination' (n)
<i>praktika</i>	--	<i>pràktiká</i> 'practise' (v)
<i>praktika</i>	<i>práktika</i>	<i>práktikà</i> 'practice' (n)

The assumption that stress and tone assignment takes place after conversion finds further support from stress and tone patterns in some other derived words: tone and stress assignment treats the derived word as it would an underived word (with the exception of nouns derived through suffixation of the auto-stressed suffix *-dó* and through suffixation of *-mentu* which takes words as input). Compare for instance the base verb *bende* with the regular penultimate stress of bisyllabic verbs and the prefixed verb *rebendé* with final stress, as is appropriate for trisyllabic verbs.

We may conclude therefore that prosodic structure is built after most of the derivational component, and that bases enter a derivational relationship with only unpredictable information specified (i.e. irregular placement of tone) (with the exceptions noted for *-mentu* suffixation and *-dó* suffixation).

(15) base verbs:	suffixed forms:
<i>morde</i> 'bite'	<i>mordementu</i> 'pain' (initial)
<i>risibí</i> 'receive'	<i>risibidó</i> 'recipient' (final)
<i>stima</i> 'love'	<i>stimashon</i> 'love' (n) (final)
<i>enfatisá</i> 'emphasize'	<i>enfatisabel</i> 'emphasizeable' (penultimate) ⁸
<i>skars</i> 'scarce'	<i>skarsedat</i> 'scarcity' (final)
<i>bende</i> 'sell'	<i>rebendé</i> 'retail' (final)

5 Observations on productivity

We noted earlier that Papiamentu vocabulary seems roughly divided along etymological lines with respect to some of the morphology that words may take (see section 1.2). Table 1 shows that non-Ib verbs typically have homophonous deverbal nouns related to them, in contrast with Ib verbs, which typically have nouns related through tone or stress shift.

We are now in a position to account for the disparity as an accidental result of the superficial differences between conversion of verbs of different length and tone melody. The majority of Ib verbs are polysyllabic and end in the vowels *-a*, *-e* or *-i*, the theme vowels of their Iberian cognates; they have the tone melody appropriate to a verb of two, three or more syllables. Consonant-final Ib verbs which are not reduced forms of polysyllabic verbs are: *bal* 'be worth, cost', *ban* 'go' (exhortative; cf. *bai* 'go'), *dal* 'hit', *duel* 'feel sorry', *por* 'can, be able'. This may be compared with Du and E verbs, the majority of which is monosyllabic and ends in a consonant.

The small number of bisyllabic Du and E verbs divides about equally into verbs ending in a consonant (e.g. *ferstòp* 'hide'), and those ending in a vowel. In the latter class, we distinguish verbs with a HL melody (e.g. *puiuru* 'powder', *chapi* 'weed'), and those with a LH melody (e.g. *harka* 'rake', *stinki* 'stink'). Only the latter conform to the template for Ib bisyllabic verbs. Conversion of non-Ib verbs which conform to the template established for Ib verbs thus takes the expected form of tone shift, whereas conversion of verbs that do not conform to this template takes a superficially deviant form.

As noted in section 2.5, conversion of trisyllabic and longer verbs displays semantic and phonological idiosyncrasies which are attributable to the etymological source. There is no evidence that conversion of verbs of this length can be extended to verb/noun pairs which are not found in the source language. This morphological relation then seems to differ in

this respect from conversion of shorter verbs. But before we declare that these are, after all, different processes, we should ask ourselves whether conversion of shorter verbs is really productive, i.e. whether conversion defines a relationship between verbs and nouns that can be extended to derive new pairs.

Joubert (1991) contains 276 monosyllabic verbs, of which 98 have related nouns of the same form. Of these verb/noun pairs, 83 can be straightforwardly accounted for as inherited pairs. This is clear for E verb/noun pairs such as *brek* 'brake', *gris* 'grease', *slais* 'slice'. For Du verb/noun pairs the situation is slightly more complicated. The majority of these verbs in Papiamentu can be related to a singular present tense form (identical to the stem form in the following list) rather than an infinitive or a plural present tense form (identical to the infinitive); as shown in (16), the verb stem is homophonous with the noun in these cases, which can thus be accounted for as inherited pairs.

(16) Papiamentu v/n:	Dutch verb stem:	Dutch infinitive:	Dutch noun:
<i>fèrf</i> 'paint'	verf [vɛrf]	verven [vɛrvə]	verf [vɛrf]
<i>plu-plug</i> 'plow'	ploeg [plux]	ploegen [pluxə / pluxə]	ploeg [plux]
<i>zòm</i> 'hem'	zoom [zom]	zomen [zomə]	zoom [zom]
<i>drai</i> 'turn'	draai [drai]	draaien [drajə]	draai [drai]

Among the 15 monosyllabic verb/noun pairs which cannot be accounted for as direct inheritances seven seem to result from processes of reduction of an etymological verb, noun, or both, and some others from semantic drift rather than from productive conversion. This leaves us with five pairs of which only one member has a cognate in the source language; some are given in (17). All in all a meagre result.

- (17) *dim* 'dip (headlights) / dipped headlights' (cf. Du *dimmen* 'dip'), *pik* 'peck (by bird) / (bird's) beak' (cf. Du *pikken* 'peck'), *was* 'polish' (v/n) (cf. Du *was* 'polish' (n))

A better case can be made for the productivity of conversion relating bisyllabic verb/noun pairs. First of all, most such pairs can again be related to verb/noun pairs in the source languages, although we need to postulate changes for some, such as truncation, the addition of a final epenthetic vowel, or the change of a final vowel; such cases are illustrated in (18); Spanish forms represent the Iberian etyma.

(18) Papiamentu v/n:	source verb:	source noun:
<i>harka</i> 'rake'	Du harken (stem: hark)	hark
<i>kaska</i> 'peel'	Ib cascar	cáscara
<i>marcha</i> 'march'	Du marcheren (stem: marcheer)	Ib marcha
<i>parti</i> 'share'	Ib partir	parte
<i>pousa</i> 'pause'	Du pauzeren (stem: pauzeer)	pauze

About a quarter of bisyllabic verb/noun pairs cannot be related to etymological pairs. Of about half of these the etymology is unknown to me. The remaining can be related to an Ib verb or noun, but not to both; some examples follow. Again, the number such cases (approximately 20) is relatively small.

(19) Papiamentu v/n:	source verb:	source noun:
<i>bende</i> 'sell/sale'	Ib bender	--
<i>faha</i> 'gird/belt'	--	Ib faja
<i>marga</i> 'embitter/gall'	Ib amargar	--
<i>piedra</i> 'pave/stone'	--	Ib piedra

6 Summary

Non-affixal relations between Papiamentu verbs and nouns which have been described as conversion, tone shift and stress shift turn out to be instances of a single process of conversion. The superficial differences which have given rise to these three labels are accounted for by the assumption that building prosodic structure and predictable tone assignment take place after conversion.

We have seen that verbs are distinguished from other content words with respect to stress and tone assignment: verbs display fixed stress and tone melodies, dependent on the length of the verb, whereas stress and tone in other content words is quantity sensitive. The behaviour of affixed forms under stress and tone assignment was shown to be like that of underived forms in many cases. Productivity of conversion is limited at best: only a small number of monosyllabic and bisyllabic verb/noun pairs cannot be related to verb/noun pairs in the source languages.

Notes

1. The orthography of Papiamentu never ceases to provide grounds for contention between Curaçao and Aruba. First of all, the Aruban dialect constrains /u/ to non-final position, and this is painfully obvious in the name of the language: *Papiamentu* for speakers from Curaçao and

Bonaire, *Papiamentu* for Aruban speakers. Secondly, there have been competing spelling proposals, and whereas Curaçao has adopted an orthography which is a compromise between phonemic and etymological considerations, Aruba has adopted an etymological, i.e. Spanish-based orthography. We have adopted the Curaçao spelling for this description of Papiamentu. The conventions are summarized here; the orthographic representation is given in parentheses where it differs from the phonetic representation (see Kouwenberg & Murray (forthc.) for discussion):

front vowels	back vowels	labial	dental	alveopalatal	palatal	velar	glottal
-ro	+ro	p, b	t, d	tʃ (ch), dʒ (dj)		g (g, gu)	
i	y (ü)	f, v	s, z	ʃ (sh), ʒ (zj)		x (g)	h
e	Y (ü)	m	n		ɲ (ñ)	ŋ (n)	
ɛ (è)	ɔ (ò)		l, r				
a		w				j (y)	

There are some dialectal differences among the three islands, but the dialects are mutually intelligible. Although some vocabulary items may be island-restricted, it is of no consequence for the position developed here.

2. This form was found acceptable by one consultant, but rejected by another.

3. Most of the data presented here can also be found in Kouwenberg & Murray (forthc.) which contains descriptions of Papiamentu phonology, morphology and syntax.

4. Participles are formed in two distinct ways, following a so-called Iberian and a Dutch pattern. The Iberian pattern applies to any polysyllabic verb which ends in one of the (Iberian theme) vowels *-a*, *-e*, *-i*. There is an additional requirement that bisyllabic verbs have the regular LH melody to be eligible to this process. Ib participle formation either involves stress shift (from penultimate in the stem to final in the participle form in the case of bi-syllabic verbs) or no change at all (in the case of longer verbs which all have final stress). Verbs that end in *-e* undergo optional raising of the final vowel in the participle form (e.g. *bende*). Among non-Ib bisyllabic verbs are some with a LH melody which conform to the Iberian pattern (e.g. Du *harka*). One Du verb which conforms to all requirements except that it ends in the wrong vowel also submits to the Iberian participle formation (*pupu*). The Dutch pattern applies to any other verb, and involves prefixation of *he-* (or *e-*, *di-*, *i-*) to the verb. In the class of verbs that conform to the Dutch pattern, we find predominantly Du and E verbs (e.g. *tren*) and one Ib (*dal*).

- (1) Iberian pattern: *morde* 'bite' - *mordé* 'bitten', *dividí* 'divide' - *dividí* 'divided', *harka* 'rake' - *harká* 'raked', *pupu* 'relieve oneself / dirty by excrement' - *pupú* 'dirtied by excrement'
- (2) Dutch pattern: *ferf* 'paint' - *heferf* 'painted', *wèlder* / *wèldro* 'weld' - *hewèlder* / *hewèldro* 'welded', *tren* 'train' - *hetren* 'trained', *dal* 'hit' - *hedal* 'hit'

Römer (1991: 97ff) contains a note on the origin of the Papiamentu participle. His suggestion is that the Iberian pattern resulted from an inherited Iberian participle with loss of final *-du*. At least some of the nouns that are homophonous with the participle can similarly be accounted for by loss of final *-du* or *-do*.

5. There is an additional class of cognate object nouns formed in this manner, but with properties which distinguish them from the deverbal nouns discussed so far. Cognate object nouns refer to the state or event of the verb. Their use is restricted to idiomatic expressions (as in *dal un...*) and emphatic constructions (immediately following the base verb); the latter construction is also available to intransitive verbs. Participles formed on the Dutch pattern (see note 4) are also eligible to appear in this construction.

- | | |
|--|--|
| (1) <i>mi ta dal un kaná</i>
1Sg Asp hit one walk
'I am taking a walk' | <i>mi a kana un kaná</i>
1Sg Asp walk one walk
'I took quite a walk' |
|--|--|

In contrast, the deverbal nouns discussed in this article are free to occur anywhere, and there seem to be no participles formed on the Dutch pattern in the class of 'free' deverbal nouns. All this suggests that the formation of cognate object nouns is syntactically motivated, and not a genuine deverbal nominalisation.

6. The verbs that end in a consonant contain the central vowel [ə] in the final syllable; see note 7 on this.

7. Words that end in l, r, n and have penultimate stress typically contain [ə] in the final syllable (e.g. *binager* 'vinager', *òrgel* 'organ', *èksamen* 'examination'), whereas words that end in l, r, n and have final stress contain a full vowel in the final syllable (e.g. *fabor* 'favour', (*h*)*ospital* 'hospital', *mashin* 'machine'). This suggests that words of the first class contain only the consonant l, r, n in the rhyme. Syllables which contain only a single weight unit in the rhyme are light syllables. The presence of [ə] in the final syllable of these words is a matter of phonetic implementation. There are some exceptions; these consist of words that end in l, r, n and have

penultimate stress whereas the final syllable contains a full vowel (e.g. *difisil* 'difficult', *mártir* 'martyr').

8. Deverbal adjectives which end in *-bel* have penultimate stress. I assume that the final syllable of these contains only syllabic /l/ in the rhyme; see note 7.

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